

Work Order ID 75097

\*75097\*

Page 1

October-17-11 1:24:02 PM

Item ID: D2933-1 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Saddle LH In, 206  
 Start Date: 17/10/2011 Start Qty: 6.00 \*6\* Cust Item ID:  
 Required Date: 04/11/2011 Req'd Qty: 6.00 \*6\* Customer:  
 Reference:

Approvals: Process Plan: M.L.J. Date: 11/10/17 Tooling: Date:  
 QC: Date: SPC (Y/N): Date:  
 Run Start \*NR1\*  
 Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2933	Rev C

100	HAAS CNC VERTICAL MACHINING #1	0.00							
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\*100\* HAAS 1  
 HAAS CNC vertical machine #1  
 Memo  
 Program part number and batch number. 1-Inspect part number and batch number are programmed correctly. 2-Machine Step No 1 of Folio and visually inspect as per dwg D2933 & attached Dimension Sheet 3-Machine Step No 2 of Folio and visually inspect as per  
 PO/B.O. 12/03/29  
 6 0  
 Pto

110	CONVENTIONAL MILLING MACHINE	0.00							
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\*110\* Mill Conv  
 Conventional Milling Machine  
 Memo  
 Machine Keyway and inspect per attached dimension sheet  
 PO/B.O. 12/03/29  
 6 0

120	QC1- Inspect dimensions to dimension sheet	0.00							
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\*120\* QC  
 Quality Control  
 Memo  
 PO/B.O. 12/03/29  
 6 0

W/O: 75097		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2933-1 PAR #: \_\_\_\_\_ Fault Category: Machining NCR: Yes No DQA: Not Date: 12/04/14  
 Resolution: Acceptable Disposition: Acceptance QA: N/C Closed: ✓ Date: 12/4/16

NCR: 17-1337		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/03/29	100	DM (M) is at 0.228 at ONE SPOT due to BUBBLING. 0.235 <sup>+0.005</sup> -0.000. RL operator em	CP 12.04.03 PS1042	Acceptable	PD 12/03/29	S 12/04/14	CP 12.04.03 PS1042	S 12/04/14

NOTE: Date & initial all entries

**Work Order ID 75097****\*75097\***

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Item ID: D2933-1

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Saddle LH-In, 206

Start Date: 17/10/2011 Start Qty: 6.00

**\*6\***

Cust Item ID:

Required Date: 04/11/2011 Req'd Qty: 6.00

**\*6\***

Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

QC8- Inspect parts - second check

0.00

**\*130\***

QC

Memo

0.00

Quality Control

29 12 - 1, 4 6 1

140

Chemical Conversion Coat per QSI005 4.1

0.00

**\*140\***

HandFinish

Memo

0.00

Hand Finishing

6 12-4-5.

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

**\*150\***

Powdercoat

Memo

0.00

Powder Coating

START TIME:

8h45

OVEN TEMPERATURE:

8h15 FINISH TIME:

320°F

6 12/04/06.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 75097

**\*75097\***

Page 3

October-17-11 1:24:02 PM

Item ID: D2933-1 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Saddle LH In, 206  
 Start Date: 17/10/2011 Start Qty: 6.00 **\*6\*** Cust Item ID:  
 Required Date: 04/11/2011 Req'd Qty: 6.00 **\*6\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							
<b>*160*</b>									
QC	Memo	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: <b>5428</b>	0.00							
<b>*170*</b>									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
<b>*180*</b>									
QC	Memo	0.00							
Quality Control									

**6** **124-9**

**6x** **SD**  
**12-04-10**

**12/4/10**

**12-04-10**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

October-17-11 1:24:06 PM

Page 1

Work Order ID: 75097

**\*75097\***

Parent Item: D2933-1

**\*D2933-1\***

Parent Item Name: Saddle LH In, 206

Start Date: 17/10/2011

Required Date: 04/11/2011

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP: B00.06.26New DWG rev (mpp 2069)EC  
IPP Rev:C As per Rev C 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D6101-001		Manufactured	No			100	Each	4.0000	1	6			
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**\*D6101-001\***

Saddle Billet

\*\*

PO 12/03/24

Location

Loc Qty

Loc Code

MAT040

4

66965

1

69677

2

73768

1

→ 80764

6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 75097
<b>Description:</b> 206 Saddle, Inboard, Left side		<b>Part Number:</b> D2933-1
<b>Inspection Dwg:</b> D2933 <b>Rev:</b> C <b>DSK:</b> <b>Rev:</b>		<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article
 ☐ Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	0.100	0.140		0.125	0.127	0.127	0.128	0.127
B	0.100	0.140		0.124	0.124	0.124	0.124	0.124
C	0.100	0.140		0.113	0.113	0.113	0.112	0.112
D	0.210	0.230		0.221	0.221	0.223	0.223	0.223
E	1.245	1.255		1.250	1.250	1.250	1.250	1.250
F	1.245	1.255		1.250	1.250	1.250	1.250	1.250
G	2.495	2.505		2.500	2.500	2.500	2.500	2.500
H	0.510	0.515		0.511	0.512	0.513	0.512	0.512
I	1.572	1.582		1.577	1.577	1.577	1.577	1.577
J	2.495	2.505		2.500	2.500	2.500	2.500	2.500
K	0.257	0.262		0.258	0.258	0.258	0.258	0.258
L	0.312	0.317		0.313	0.313	0.313	0.313	0.313
M	0.235	0.240		0.235	0.238	0.237	0.236	0.236
N	0.100	0.140		0.126	0.126	0.127	0.126	0.126
O	0.540	0.560		0.549	0.549	0.550	0.550	0.550
P	0.490	0.510		0.499	0.499	0.500	0.499	0.498
Q	3.715	3.725		3.720	3.720	3.720	3.720	3.720
R	2.470	2.510		2.492	2.492	2.492	2.492	2.492
S	0.240	0.270		0.249	0.250	0.251	0.249	0.249
T	0.100	0.180		0.135	0.135	0.135	0.135	0.135
U	1.625	1.635		1.630	1.630	1.630	1.630	1.630
V	1.362	1.372		1.367	1.367	1.367	1.367	1.367
W	0.316	0.321		0.316	0.316	0.316	0.316	0.316
X	1.125	1.145		1.137	1.137	1.138	1.138	1.138
Y	1.565	1.585		1.574	1.575	1.575	1.578	1.576
Z	0.178	0.198		0.188	0.188	0.188	0.188	0.188
AA								
AB								
AC								
AD								
AE								
Accept/Reject								

<b>Measured by:</b> PO/BA	<b>Date:</b> 12/03/29
<b>Audited by:</b> RE	<b>Date:</b> 12-4-4
<b>Prototype Approval:</b> N/A	<b>Date:</b> N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	06.10.03	Removed DT8683, DT8686 & DT8690	KJ/JLM	
D	07.03.21	Revised per drawing revision C	KJ/JLM	
E	08.01.16	DT8695 A/B removed from dimension Y	KJ/EC/DD	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 75097
<b>Description:</b> 206 Saddle, Inboard, Left side		<b>Part Number:</b> D2933-1
<b>Inspection Dwg:</b> D2933 <b>Rev:</b> C <b>DSK:</b> <b>Rev:</b>		<b>Page 1 of 1</b>

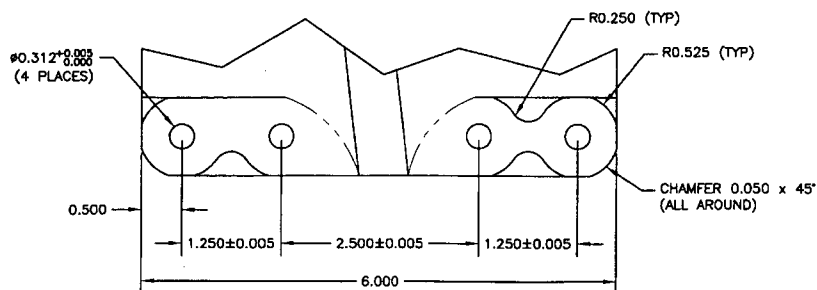
### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				16	2	3	4	5
A	0.100	0.140		0.125				
B	0.100	0.140		0.124				
C	0.100	0.140		0.112				
D	0.210	0.230		0.221				
E	1.245	1.255		1.250				
F	1.245	1.255		1.250				
G	2.495	2.505		2.500				
H	0.510	0.515		0.512				
I	1.572	1.582		1.577				
J	2.495	2.505		2.500				
K	0.257	0.262		0.258				
L	0.312	0.317		0.313				
M	0.235	0.240		0.238				
N	0.100	0.140		0.127				
O	0.540	0.560		0.550				
P	0.490	0.510		0.499				
Q	3.715	3.725		3.720				
R	2.470	2.510		2.492				
S	0.240	0.270		0.248				
T	0.100	0.180		0.135				
U	1.625	1.635		1.630				
V	1.362	1.372		1.367				
W	0.316	0.321		0.316				
X	1.125	1.145		1.138				
Y	1.565	1.585		1.575				
Z	0.178	0.198		0.188				
AA								
AB								
AC								
AD								
AE								
Accept/Reject								

<b>Measured by:</b> PO/B.A	<b>Date:</b> 12/03/29
<b>Audited by:</b> RA	<b>Date:</b> 12-7-7
<b>Prototype Approval:</b> N/A	<b>Date:</b> N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	06.10.03	Removed DT8683, DT8686 & DT8690	KJ/JLM	
D	07.03.21	Revised per drawing revision C	KJ/JLM	
E	08.01.16	DT8695 A/B removed from dimension Y	KJ/EC/DD	

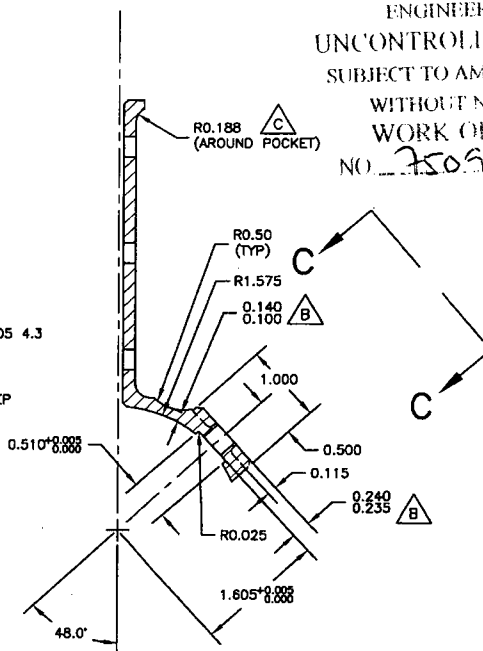


VIEW C-C

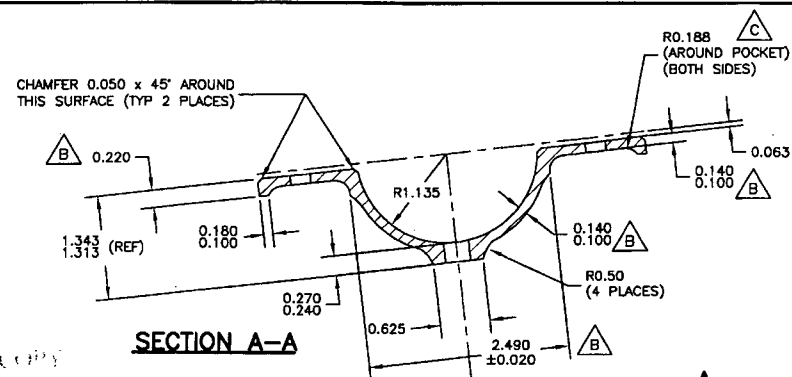
D2933-1 LH SADDLE (SHOWN)  
D2933-2 RH SADDLE (OPPOSITE)

NOTES:

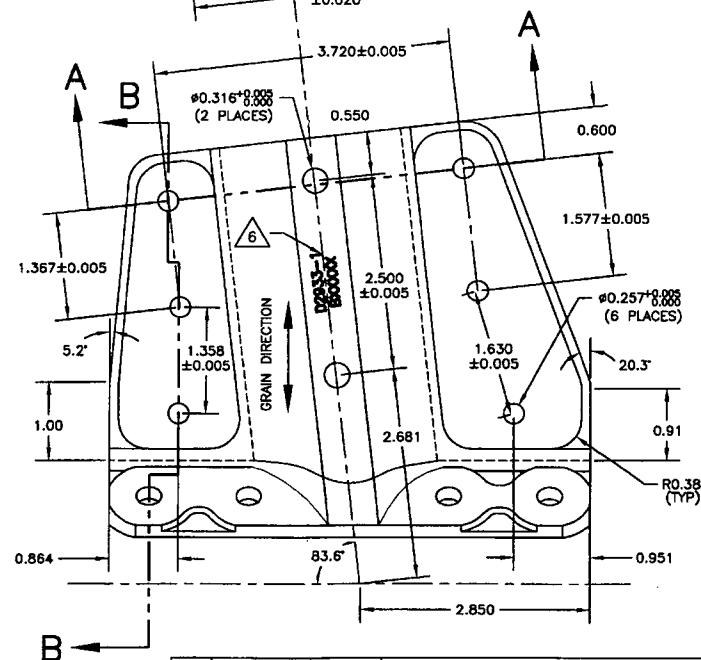
- 1) MATERIAL: ALUMINUM 7075-T7351 (QQ-A-250/12)  
(MAKE FROM D6101-001 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP



SECTION B-B



SECTION A-A



C	06.11.09	R0.188 WAS R0.30 TO R0.25
B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.10.29	NEW ISSUE
DESIGN	CB	DART DART AEROSPACE USA, INC.
CHECKED	PH	D2933
DATE	06.11.09	SADDLE INSIDE

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DART AEROSPACE USA, INC.

DRAWING NO.  
D2933

TITLE  
SADDLE INSIDE

REV. C  
SHEET 1 OF 1

SCALE  
2:3

07.02.12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries